

REMARKS

Claims 1-3 and 5-7 remain in the application.

Claims 1-3 and 5-7 stand rejected under 35 U.S.C. § 102(b) as being anticipated by United States Patent No. 5,882,159 to *Müller*. Independent claim 1 has been amended to include the further limitation, “continuing to drive said annular lip of said die member against a panel portion surrounding said opening in said panel and against an outer periphery of said annular end face of said pilot portion, thereby shaving an annular outer portion of said pilot portion generating an annular radial protrusion continuously against an inner portion of said panel portion.”

Independent claim 5 has also been amended to include the further limitation, “continuing to drive said annular lip of said die member against said annular end face of said pilot portion and an annular panel portion surrounding said opening in said panel, thereby shaving an annular outer portion of said pilot portion generating an annular radial protrusion continuously against said panel portion.”

The purpose for generating an “annular radial protrusion” 76 is to seal the periphery of the pilot portion 22 thereby providing a sealed female fastener and panel assembly. Applicant respectfully submits that the annular radial protrusion that is shaved from the annular outer portion of the pilot portion provides a seal between the female fastener and panel that the *Müller* reference is not capable of providing. Furthermore, Applicant respectfully submits that the *Müller* reference not only fails to provide a sealed female fastener and panel assembly, but also teaches away from the method of forming the sealed and female fastener assembly of the present invention because *Müller* merely displaces “noses” 58, 284 causing an inconsistent deformation of panel material not intended to provide a seal.

The Examiner contends that the annular lip 48 of the die member 12 set forth in *Müller* has an inner diameter that it is less than an outer diameter of the annular end face of the

cylindrical punch portion 132. However, *Müller* discloses a die button 12, 212 having a tooth extending in a longitudinal direction of the die button region 56. The tooth locally deforms the material of the cylindrical punch section or pilot 32 forming a nose 58 to form lock the sheet metal material. While deforming a nose 58 might improve pull-out force of the fastener, the nose provides an inconsistent deformation of the panel 60 that is prone to leak. This specifically differs from the “annular radial protrusion,” which provides a continuous and uniform deformation of the panel portion enhancing the sealing characteristics of the fastener and panel assembly. This is further demonstrated by the noses 284 shown in Figure 4 of *Müller*. Additionally, noses 276 are formed in the contact surface of the fastener 210 of *Müller* causing further inconsistent deformation of the panel into the recess ring 18, 218.

Further inconsistencies are formed at the sealing joint between the panel 16 and the fastener 10 disclosed in *Müller* by noses or webs 164, 166, each of which are located at the inner and outer wall of the annular groove 18, 118, 218. These webs 164, 166 reduce, and even prevent deforming the panel portion radially outwardly beneath the inclined outer side wall of the annular groove as recited in dependent claims 2 and 6 of the present application. The anti-rotation feature 48 of the present application is spaced from both the inner and outer wall of the annular groove to help facilitate the deformation of the panel portion radially outwardly beneath the inclined outer side wall. Therefore, Applicant submits that dependent claims 2 and 6 are also patentable over *Müller*.

Still further, Applicant submits that the outer wall of *Müller* includes a linear surface unlike the outer side wall of the annular groove recited in dependent claims 3 and 7 as being arcuately inclined. The arcuate surface of the outer side wall further facilitates the deformation of the panel portion outwardly beneath the inclined outer side wall and assists forming a leak proof seal between the panel and the fastener. Therefore, Applicant respectfully submits that dependent claims 3 and 7 are also patentable over *Müller*.

Applicant respectfully submits that the amended claims in associated arguments set forth above place the present application in a condition for allowance and such allowance is respectfully solicited.

Enclosed is our check in the amount of \$790.00 as required for the filing of this Preliminary Amendment and Request for Continuing Examination. Also enclosed is our check for \$450.00 for the two-month extension fee. If there are any additional fees due, the Commissioner is authorized to charge our Deposit Account for those additional fees or credit the account for any overpayments regarding this Preliminary Amendment and Request for Continuing Examination.

Respectfully submitted,

HOWARD & HOWARD ATTORNEYS, P.C.

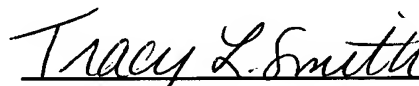


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CERTIFICATE OF EXPRESS MAILING

I hereby certify that the enclosed **Preliminary Amendment and Request for Continuing Examination, Declaration and fee** are being deposited with the United States Postal Service as Express Mail, postage prepaid, in an envelope as "Express Mail Post Office to Addressee," Mailing Label No. **EV901739985US** and addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450 on **May 15, 2007**.



Tracy L. Smith